Power Distribution Products

Contents

Power Distribution Overview

Product Selection Guide

Series	Current Range	UL Certification	High Short Circuit Current Rating ①	UL 508A Approved for Industrial Control Panels		
				Branch Circuits	Feeder Circuits	HVAC UL 1995
CH162	115–175A	UL 1059 Recognized	No	Yes	No ②	Yes
CH163	175–420A	UL 1059 Recognized	No	Yes	No ②	Yes
CH165	620–840A	UL 1059 Recognized	No	Yes	No ②	Yes
CHDB	175–570A	UL 1953 Listed	Yes	Yes	Yes	Yes

Notes

① Refer to **Page V7-T8-116** to determine short circuit current ratings with fuses and **Pages V7-T8-117** and **V7-T8-118** to determine short circuit current ratings in conjunction with specific Eaton circuit breakers.

② Single-pole units, when installed with proper spacings, may meet requirements for UL 508A feeder circuits.

CHDB Series—Power Distribution Blocks, Enclosed and Open

Contents

CHDB Series—Power Distribution Blocks

Product Description

Eaton's CHDB Series of Power Distribution Blocks was designed for high short circuit current rating (SCCR) applications up to 200,000 amperes. They are assembled with the minimum spacing to meet UL 1953 requirements for feeder circuits in UL 508A industrial control panels, and provide significant wiring flexibility.

Available in three-pole open style and single-pole enclosed style with a variety of terminal arrangements and current-carrying capability up to 570 amperes.

Features and Benefits

Enclosed Style

- IP20 finger-safe enclosure
- 600 Vac or Vdc (UL 1953), 690 Vac or Vdc
- DIN rail or panel mount
- Captive termination screws prevent lost screws
- Single-pole, gang mountable for multi-pole applications
- Tin plated Al connections suitable for Cu conductors
- Flammability, UL 94V-0

Open Style

- 600 Vac or Vdc (UL 1953)
- Panel mount
- Three-pole open design for easy wiring
- Tin-plated Al connections suitable for Cu conductors
- Flammability, UL 94V-0
- Available covers for additional protection (does not meet IP20)

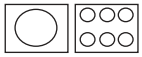
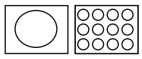
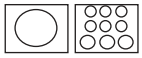
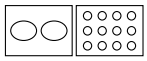
Standards and Certifications

- UL Listed 1953, Guide QPQS, File E256146
- CSA Certified, Class 6228-01, File 15364 (enclosed style)
- CE Component IEC 60947-7-1 (enclosed style)
- IEC 60529, IP20 (finger-safe) under specific wiring conditions (enclosed style)

Listed

Product Selection

CHDB Series—Power Distribution Blocks

	Line Connection	Load Connection	Configuration	Amperes	Style	Poles	Catalog Number
CHDB2203 (Open) 	2/0–#8 AWG	(4) #4–#14 AWG		175	Open	3	**CHDB2203**
	2/0–#8 AWG	(6) #4–#14 AWG		175	Open	3	**CHDB3213**
	300 kcmil–#4 AWG	(6) #4–#12 AWG		310	Open	3	**CHDB3233**
	300 kcmil–#4 AWG	(12) #4–#14 AWG		310	Open	3	**CHDB3703**
	300 kcmil–#4 AWG	(6) #2–#12 AWG		310	Open	3	**CHDB3713**
		(3) 1/0–#12 AWG		310	Open	3	**CHDB3713**
CHDB204F (Enclosed) 	2/0–#8 AWG	2/0–#8 AWG		175	Enclosed ①	1	**CHDB204F**
	500 kcmil–#6 AWG	(6) #2–#14 AWG		380	Enclosed ①	1	**CHDB330F**
	300 kcmil–#4 AWG	(12) #4–#14 AWG		570	Enclosed ①	1	**CHDB377F**

Technical Data and Specifications

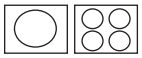
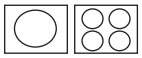
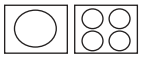
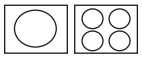
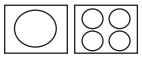
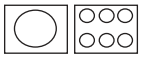
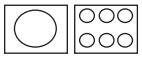
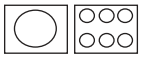
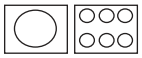
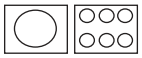
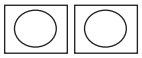
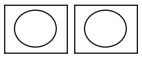
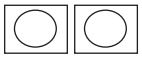
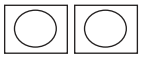
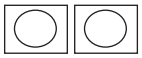
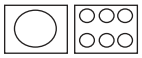
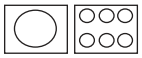
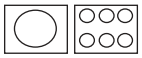
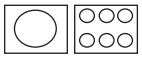
Power Terminal Block Short-Circuit Current Ratings (SCCR) with Fuses

Catalog Number	Terminal Copper Conductors		Maximum Fuse Class and Amperes				
			J	T	RK-1	RK-5	
	Line	Load	LPJ	JJS/JJN	LPS-RK/LPN-RK	FRS-R/FRN-R	SCCR (kA)
CHDB2203	2/0–#8 AWG	#4–#12 AWG	200	200	200	60	200
		#4–#14 AWG	175	175	100	60	100
			200	200	100	60	50
CHDB3213	2/0–#8 AWG	#4–#12 AWG	400	400	200	100	200
			400	400	400	100	100
		#4–#14 AWG	175	175	100	60	100
CHDB3233	300 kcmil–#4 AWG	#4–#8 AWG	400	400	200	100	200
			400	400	400	100	100
		#4–#12 AWG	175	175	100	60	100
CHDB3703	300 kcmil–#4 AWG	#4–#8 AWG	400	400	200	100	200
		#4–#14 AWG	400	400	400	100	100
			175	175	100	60	100
CHDB3713	300 kcmil–#4 AWG	1/0–#6 AWG	400	400	200	100	200
		#4–#12 AWG	400	400	400	100	100
			175	175	100	60	100
CHDB204F	2/0–#8 AWG	2/0–#8 AWG	200	200	100	60	200
CHDB330F	500 kcmil–#6 AWG	#2–#6 AWG	400	400	200	100	200
		#2–#14 AWG	200	200	100	30	50
			175	175	100	30	100
CHDB377F	300 kcmil	#4–#8 AWG	600	600	400	200	200
	300 kcmil–#4 AWG	#4 AWG	600	600	400	200	50
		#4–#14 AWG	200	200	100	30	50

Note

① Finger-safe.

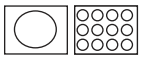
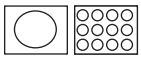
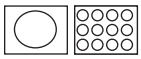
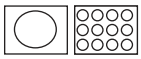
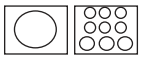
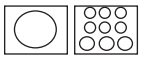
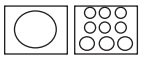
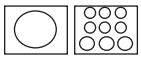
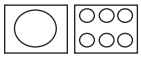
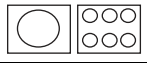
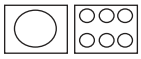
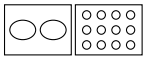
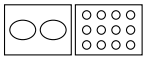
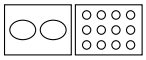
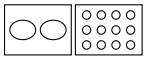
Power Terminal Block Short-Circuit Ratings (SCCR) for UL 508A Applications with Circuit Breakers

Catalog Number	Description	Enclosure Size in Inches (mm)	Current Rating	Opening per Pole		Line Conductors Cu	Load Conductors Cu	SCCR @ 480V (Load Side)	Eaton Breaker	Available Breaker Current Ratings
				Line	Load					
CHDB2203	Feeder Listed Open PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	#4–#10 #12 #14	18 kA 18 kA 14 kA	EGB125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB2203	Feeder Listed Open PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	#4–#10 #12 #14	25 kA 22 kA 14 kA	EGE125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB2203	Feeder Listed Open PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	#4–#10 #12 #14	50 kA 22 kA 14 kA	EGS125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB2203	Feeder Listed Open PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	#4–#10 #12 #14	65 kA 22 kA 14 kA	EGH125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB2203	Feeder Listed Open PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	#4–#10 #12 #14	65 kA 22 kA 14 kA	EGC125 ①	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3213	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	175			2/0–#8	#4–#10 #12 #14	18 kA 18 kA 18 kA	EGB125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3213	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	175			2/0–#8	#4–#10 #12 #14	25 kA 22 kA 18 kA	EGE125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3213	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	175			2/0–#8	#4–#10 #12 #14	50 kA 22 kA 18 kA	EGS125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3213	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	175			2/0–#8	#4–#10 #12 #14	65 kA 22 kA 18 kA	EGH125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3213	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	175			2/0–#8	#4–#10 #12 #14	65 kA 22 kA 18 kA	EGC125 ①	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB204F	Feeder Listed Enclosed PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	2/0–#8	18 kA	EGB125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB204F	Feeder Listed Enclosed PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	2/0–#8	25 kA	EGE125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB204F	Feeder Listed Enclosed PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	2/0–#8	35 kA	EGS125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB204F	Feeder Listed Enclosed PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	2/0–#8	65 kA	EGH125	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB204F	Feeder Listed Enclosed PDB	16.00 x 16.00 x 6.75 (406.4 x 406.4 x 171.5)	175			2/0–#8	2/0–#8	65 kA	EGC125 ①	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 125
CHDB3233	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	25 kA 25 kA 14 kA	JGE250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3233	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	35 kA 35 kA 14 kA	JGS250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3233	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	65 kA 42 kA 14 kA	JGH250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3233	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	65 kA 42 kA 25 kA	JGC250 ①	70, 90, 100, 125, 150, 175, 200, 225, 250

Note

① This breaker frame is marked current limiting and suitable for use as current limiting per UL 508A SB.4.3.2.

Power Terminal Block Short-Circuit Ratings (SCCR) for UL 508A Applications with Circuit Breakers, continued

Catalog Number	Description	Enclosure Size in Inches (mm)	Current Rating	Opening per Pole		Line Conductors Cu	Load Conductors Cu	SCCR at 480V (Load Side)	Eaton Breaker	Available Breaker Current Ratings
				Line	Load					
CHDB3703	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	25 kA 25 kA 14 kA	JGE250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3703	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	35 kA 35 kA 14 kA	JGS250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3703	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	65 kA 42 kA 14 kA	JGH250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3703	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	65 kA 42 kA 25 kA	JGC250 ①	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3713	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	25 kA 25 kA 14 kA	JGE250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3713	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	35 kA 35 kA 14 kA	JGS250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3713	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	50 kA 42 kA 14 kA	JGH250	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB3713	Feeder Listed Open PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	310			350 kmil–#4	#4–#6 #8 #10	65 kA 50 kA 25 kA	JGC250 ①	70, 90, 100, 125, 150, 175, 200, 225, 250
CHDB330F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	380			500 kmil–#3	#2–#8	14 kA	LGE400	250, 300, 350, 400
CHDB330F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	380			500 kmil–#3	#2–#8	14 kA	LGS400	250, 300, 350, 400
CHDB330F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	380			500 kmil–#3	#2–#8	14 kA	LGH400	250, 300, 350, 400
CHDB330F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	380			500 kmil–#3	#2–#8	25 kA	LGC400 ①	250, 300, 350, 400
CHDB377F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	570			(2) 300 kmil–#2	#4 #6 #8	30 kA 18 kA 14 kA	LGE600	250, 300, 350, 400, 500, 600
CHDB377F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	570			(2) 300 kmil–#2	#4 #6 #8	30 kA 18 kA 14 kA	LGS600	250, 300, 350, 400, 500, 600
CHDB377F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	570			(2) 300 kmil–#2	#4 #6 #8	30 kA 18 kA 14 kA	LGH600	250, 300, 350, 400, 500, 600
CHDB377F	Feeder Listed Enclosed PDB	24.00 x 20.00 x 6.75 (609.6 x 508.0 x 171.5)	570			(2) 300 kmil–#2	#4 #6 #8	42 kA 35 kA 14 kA	LGC600 ①	250, 300, 350, 400, 500, 600

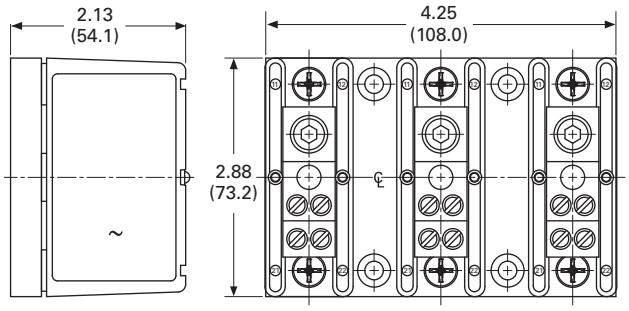
Note

① This breaker frame is marked current limiting and suitable for use as current limiting per UL 508A SB.4.3.2.

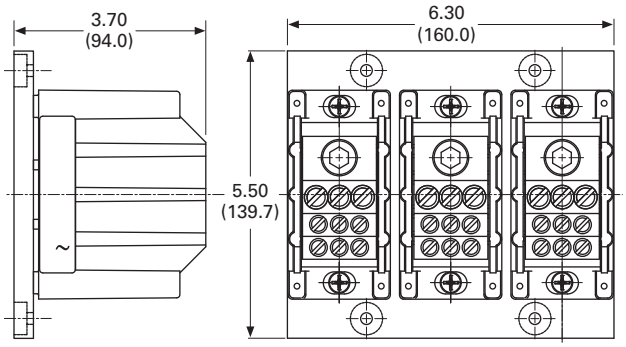
Dimensions

Approximate Dimensions in Inches (mm)

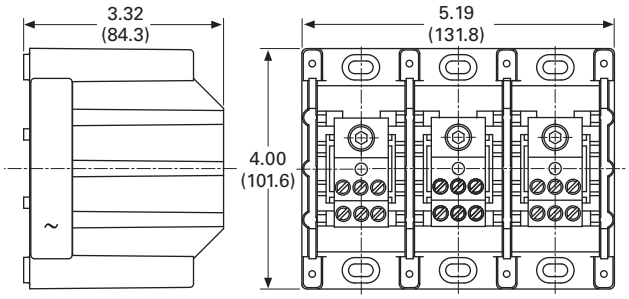
CHDB2203



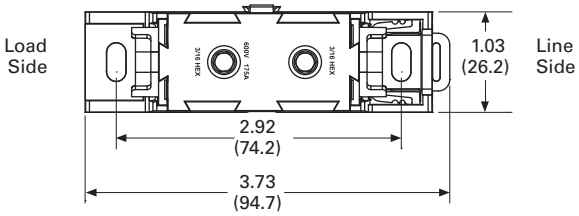
CHDB3713



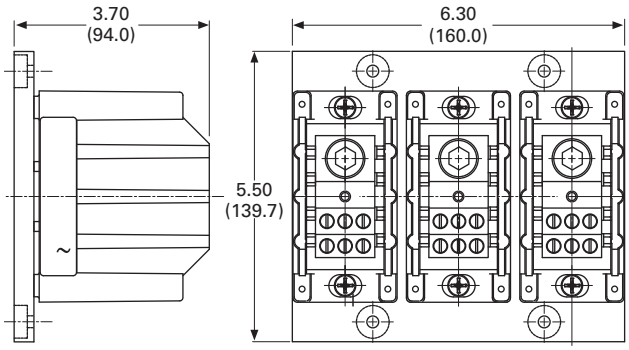
CHDB3213

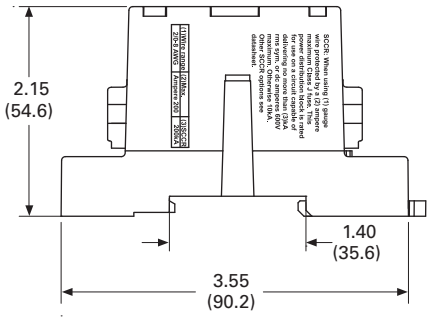


CHDB204F

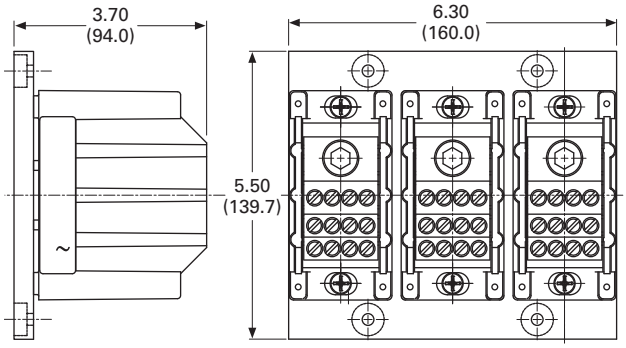


CHDB3233



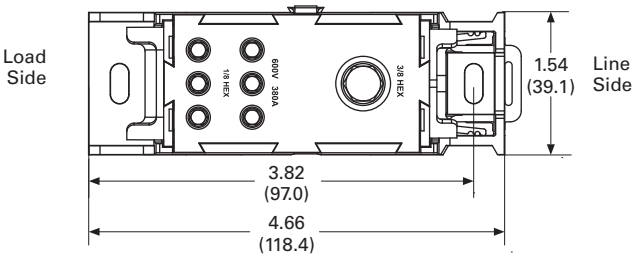


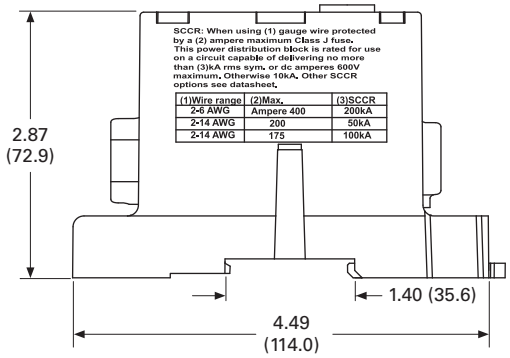
CHDB3703



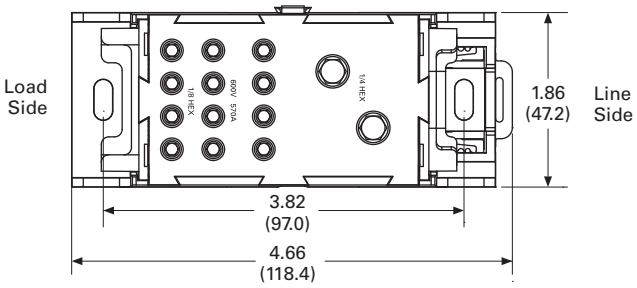
Approximate Dimensions in Inches (mm)

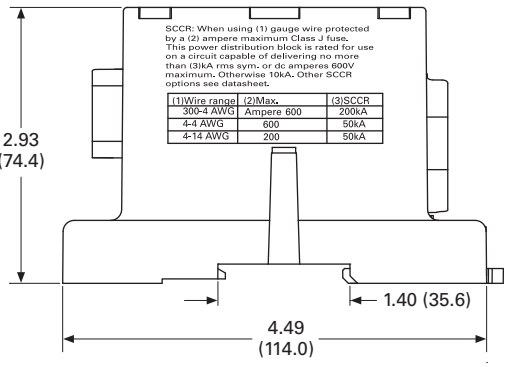
CHDB330F





CHDB377F





CH160 Series—Power Terminal Blocks

Contents

CH160 Series—Power Terminal Blocks

Product Description

The CH160 Series of Power Terminal Blocks are UL 1059 recognized power terminal blocks for branch circuit applications. All short circuit current ratings (SCCR) are 10 kA per UL 508A Table SB4.1. The blocks are available in a wide variety of wiring configurations, providing excellent flexibility.

Features and Benefits

- Ratings: To 840A, 600V
- Materials
  - Molded material; black, UL rated 94V-0 thermoplastic
- Operating temperature: 302°F (150°C)
- Optional cover: See **Page V7-T8-123**

Standards and Certifications

- UL Recognized
- CSA Certified

Product Selection

When Ordering, Specify

- Catalog number
- Number of poles (up to three-pole available)

CH160 Power Terminal Blocks—CH162 Series

Line Connection	Load Connection	Connector Material and Ampacity	Catalog Number ①
#2–#14 Cu/#8 Al	#2–#14 Cu/#8 Al	Al 115A	**CH16200_**
1/0–#14 Cu	1/0–#14 Cu	Cu 150A	**CH16201_**
2/0–#8 Cu/Al	2/0–#8 Cu/Al	Al 175A	**CH16204_**
2/0–#14 Cu/#8 Al	(4) #4–#14 Cu/#8 Al	Al 175A	**CH16220_**

CH160 Power Terminal Blocks—CH163 Series

Line Connection	Load Connection	Connector Material and Ampacity	Catalog Number ①
250 kcmil-#6 Cu	250 kcmil-#6 Cu	Cu 255A	**CH16301_**
350 kcmil-#6 Cu/Al	350 kcmil-#6 Cu/Al	Al 310A	**CH16303_**
500 kcmil-#6 Cu/Al	500 kcmil-#6 Cu/Al	Al 380A	**CH16306_**
2/0–#14 Cu/Al	(6) #4–#14 Cu/#8 Al	Al 175A	**CH16321_**
350 kcmil-#6 Cu/Al	(6) #4–#14 Cu/#8 Al	Al 310A	**CH16323_**
(2) 2/0–#14 Cu/#8 Al	(6) #4–#14 Cu/#8 Al	Al 350A	**CH16325_**
500 kcmil-#6 Cu/Al	(6) #2–#14 Cu/#8 Al	Al 380A	**CH16330_**
350 kcmil-#6 Cu/Al	(3) #2–#14 Cu/#8 Al	Al 310A	**CH16332_**
	(2) 1/0–#14 Cu/#8 Al	Al 310A	**CH16332_**
350 kcmil-#6 Cu/Al	(12) #4–#14 Cu/#8 Al	Al 310A	**CH16370_**
350 kcmil-#6 Cu/Al	(6) #2–#14 Cu/#8 Al	Al 310A	**CH16371_**
	(3) 1/0–#14 Cu/#8 Al	Al 310A	**CH16371_**
350 kcmil-#6 Cu/Al	(21) #10–#14 Cu/#10 Al	Al 310A	**CH16372_**
350 kcmil-#6 Cu/Al	(3) 1/0–#14 Cu/#8 Al	Al 310A	**CH16373_**
	(14) #10–#14 Cu/#8 Al	Al 310A	**CH16373_**
600 kcmil-#2 Cu/Al	(12) #4–#14 Cu/#8 Al	Al 420A	**CH16375_**
600 kcmil-#2 Cu/Al	(6) #2–#14 Cu/#8 Al	Al 420A	**CH16376_**
	(3) 1/0–#14 Cu/#8 Al	Al 420A	**CH16376_**

CH160 Power Terminal Blocks—CH165 Series

Line Connection	Load Connection	Connector Material and Ampacity	Catalog Number ①
(2) 350 kcmil-4 Cu/Al	(2) 350 kcmil-4 Cu/Al	Al 620A	**CH16500_**
(2) 500 kcmil-#6 Cu/Al	(2) 500 kcmil-#6 Cu/Al	Al 760A	**CH16504_**
(2) 600 kcmil-#2 Cu/Al	(4) 3/0–#8 Cu/Al	Al 840A	**CH16528_**
	(4) #4–#14 Cu/#8 Al	Al 840A	**CH16528_**
(2) 500 kcmil-#6 Cu/Al	(12) #4–#14 Cu/#8 Al	Al 760A	**CH16530_**

Note

① Incomplete catalog number—add code suffix **-1**, **-2**, **-3** for number of poles.
Example: For a 150A 1/0-#14 Cu to 1/0-#14 Cu three-pole PDB, order CH16201-**3**.

Technical Data and Specifications

CH160 Power Terminal Blocks

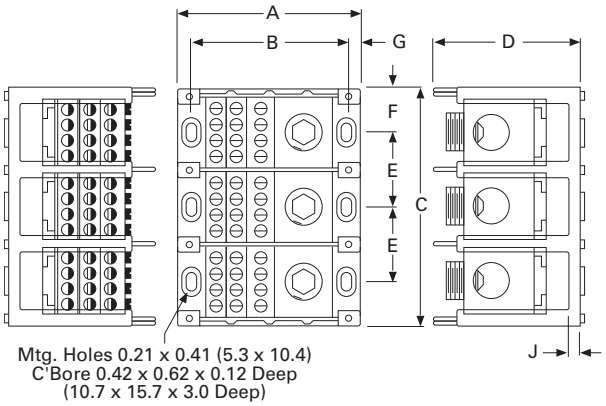
Description	Specification
Ratings	To 840A, 600V
Materials	Molded material; black, UL rated 94V-0 thermoplastic
Operating temperature	302°F (150°C)

Note: For optional cover, see Power Terminal Block Accessories, **Page V7-T8-124**.

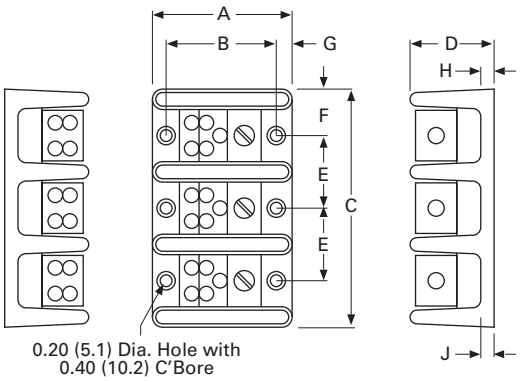
Dimensions

Approximate Dimensions in Inches (mm)

Series CH163 (Single-, Two- and Three-Pole Available)



Series CH162 and CH165 (Single-, Two- and Three-Pole Available)



CH160 Power Terminal Block Dimensions

Series	A	B	C Single-Pole	C Two-Pole	C Three-Pole	D	E4	F	G	H	J
CH162	2.87 (72.9)	2.25 (57.2)	1.06 (26.9)	1.87 (47.5)	2.68 (68.1)	1.75 (44.5)	0.81 (20.6)	0.53 (13.5)	0.31 (7.9)	0.84 (21.3)	0.31 (7.9)
CH163	4.00 (101.6)	3.37 (85.6)	1.96 (49.8)	3.58 (90.9)	5.20 (132.1)	3.32 (84.3)	1.62 (41.1)	0.97 (24.6)	0.31 (7.9)	0.87 (22.1)	0.35 (8.9)
CH165	5.50 (139.7)	4.75 (120.7)	3.12 (79.2)	5.81 (147.6)	8.50 (215.9)	3.12 (79.2)	2.68 (68.1)	1.56 (39.6)	0.37 (9.4)	1.37 (34.8)	0.62 (15.7)

Power Terminal Block Accessories

Contents

Power Terminal Block Accessories

Product Description

Protective Cover

- Guards against accidental contact
- Clear with write-on surface for field termination identification
- Available in single-, two- and three-pole

Standards and Certifications

TB Series Power Blocks

- Contact Eaton for the latest UL 508A short circuit ratings on terminal blocks
- UL Recognized: File No. E62622
- CSA Certified: File No. LR15364

Product Selection

When Ordering, Specify

- Catalog number

CH163 Series Cover

Description	Catalog Number
Single-pole cover	**CHCPDB-1** ①
Two-pole cover	**CHCPDB-2** ①
Three-pole cover	**CHCPDB-3** ①

TB Series Power Blocks

Line Connection	Load Connection	Catalog Number
#300 kcmil-#6 Cu/Al	(6) #6–#14 Cu/#8Al	**TBAN63**

Note

① Standard pack, five pieces.

Technical Data and Specifications

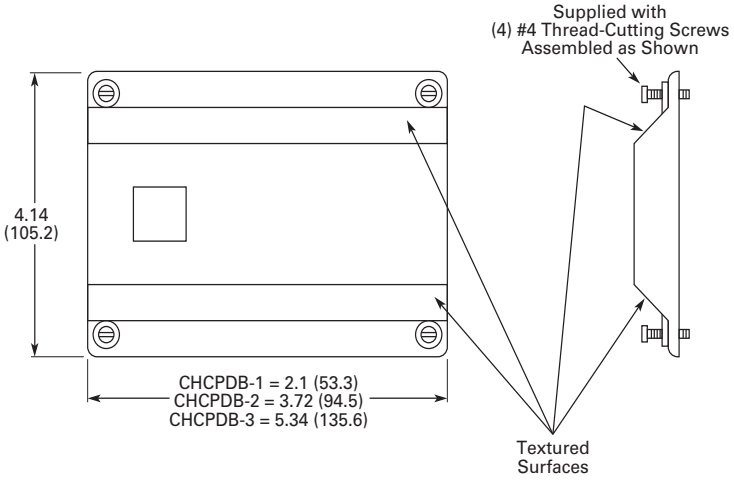
TB Series Power Blocks

Description	Specification
Ratings	285A, 600V; UL/CSA
Materials	Molded material; black, UL rated 94V-2 thermoplastic
Operating temperature	257°F (125°C)

Dimensions

Approximate Dimensions in Inches (mm)

CH163 Series Cover



TB Series Power Blocks